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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,465	12/19/2000	Douglas R. Olsen	11USF	4054

23774 7590 02/12/2003

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EXAMINER

BOS, STEVEN J

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 02/12/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/740,465**

Applicant(s)  
**Olsen et al**

Examiner  
**Steven Bos**

Art Unit  
**1754**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 26, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 15-22 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 29, 2001 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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Claim 22 is objected to because of the following informalities: "(10 degrees C)" and "(0 degrees C)" are superfluous. Appropriate correction is required.

The disclosure is objected to because of the following informalities: on pg. 16, line 15, "35-0" is questioned; it appears that --350-- was intended.

Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 10, 20, 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, "the ferrous ions" lack(s) proper antecedent basis in the claim(s).

In claim 10, "the source of the metal pickling process acid" lack(s) proper antecedent basis in the claim(s).

In claim 20, "the ferrous ions" lack(s) proper antecedent basis in the claim(s).

In claim 22, "at a certain temperature" is indefinite as to what is considered to be a certain temperature.

In claim 22, "capable of being crystallized by temperature reduction at a temperature below 32 degrees Fahrenheit, (0 degrees C)" is indefinite as to what it is that is "capable of ...".

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,6,8,10,15,16,18,21,22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Canada 956553 or EP 032886. See pp. 6-9 and 7-9, respectively.

Claim 22 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by DE 4122920 or Morimoto '664 or Senior '306. See the abstract of each.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada 956553.

CA '553 teaches the instantly claimed process of adding an acid such as sulfuric acid to a pickling solution of ferrous chloride and HCL to regenerate the HCL and form ferrous sulfate heptahydrate which is then crystallized and removed. See pp. 6-9.

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The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results, see *In re Boesch*, 205 USPQ 215.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549.

Claims 1-10,15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 32886.

EP '886 teaches the instantly claimed process of adding an acid such as sulfuric acid or phosphoric acid to a pickling solution of ferrous chloride and HCL to regenerate the HCL and form ferrous sulfate heptahydrate which is then crystallized and removed. See pp. 7-9.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results, see *In re Boesch*, 205 USPQ 215.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range

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disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, In re Malagari, 182 USPQ 549.

Applicant's arguments filed December 26, 2002 have been fully considered but they are not persuasive.

Applicant states that CA '553 does not teach anything related to the instant invention.

However CA '553 describes a metal pickling process solution.

Applicant states that there is no regeneration of ferrous chloride from a principally HCl bath as in the instant invention.

However the instant claims do not require regeneration of ferrous chloride. Instant claim 1 regenerates a metal salt and claim 15 regenerates ferrous sulfate. In other words, applicant's arguments are not commensurate with the instant claims.

Applicant states that EP '886 does not teach adding sulfuric acid to spent hydrochloric acid.

However the instant claims are not so limited. Furthermore, EP '886 teaches same on pg. 7, lines 24-28, pg. 8, lines 28-30 and claim 1.

Applicant states that the instant process does not produce pure HCl but rather produces iron ions and thereby produces ferrous sulfate heptahydrate without the use of complicated and energy intensive distillation and vacuum generation as in DE '920 by directly generating and crystallizing the ferrous sulfate at a low temperature.

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However instant claim 22 is not so limited nor does it exclude the process taught by DE '920.

Applicant's arguments with regard to Morimoto are not commensurate in scope with instant claim 22. Instant claim 22 does not require the formation of ferrous sulfate heptahydrate. Instant claim 22 does not exclude the process taught by Morimoto.

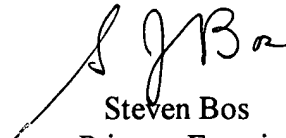
Applicant's arguments with regard to Senior are not commensurate in scope with instant claim 22. Instant claim 22 does not require the formation of ferrous sulfate heptahydrate. Instant claim 22 does not exclude the process taught by Senior.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Bos whose telephone number is (703) 308-2537. The examiner is on the increased flexitime program schedule and can normally be reached between 8AM and 6PM Monday through Friday. The FAX No. for After Final amendments is 703-872-9311; for all others it is 703-872-9310. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.



Steven Bos  
Primary Examiner  
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